**Nebraska Information Technology Commission**

# Project Proposal Form

**New or Additional State Funding Requests
for Information Technology Projects**

**FY2003-05 Biennium**

| | |
|---|---|
| **Project Title** | **FLST Web-Based Application – Phase II** |
| **Agency/Entity** | **State Fire Marshal** |

**About this form…**

The Nebraska Information Technology Commission ("NITC") is required by statute to "make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel, for which new or additional funding is requested." In order to perform this review, the NITC and DAS-Budget Division require agencies/entities to complete this form when requesting new or additional funding for technology projects. For more information, see the document entitled "Guidance on Information Technology Related Budget Requests" available at http://www.nitc.state.ne.us/forms/.

Electronic versions of this form are available at http://www.nitc.state.ne.us/forms/.

For questions or comments about this form, contact the Office of the CIO/NITC at:

Mail: Office of the CIO/NITC
521 S 14th Street, Suite 200
Lincoln, NE 68508
Phone: (402) 471-3560
Fax: (402) 471-4608
E-mail: info@cio.state.ne.us

**Submission of Form**

Completed forms must be submitted by the same date biennial budget requests are required to be submitted to the DAS Budget Division. Completed project proposal forms must be submitted via e-mail to info@cio.state.ne.us. The project proposal form should be submitted as an attachment in one of these formats: Microsoft Word; WordPerfect; Adobe PDF; or Rich Text Format. Receipt of the form by the Office of the CIO will be confirmed by e-mail. If an agency is unable to submit the application as described, contact the Office of the CIO prior to the deadline, to make other arrangements for submitting a project proposal form.

## Section I: General Information

| | |
| ---: | :--- |
| Project Title | FLST Web-Based Application – Phase II |
| Agency (or entity) | State Fire Marshal |

Contact Information for this Project:

| | |
| ---: | :--- |
| Name | Lori Loyd |
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### Section II: Executive Summary

Provide a one or two paragraph summary of the proposed project. This summary will be used in other externally distributed documents and should therefore clearly and succinctly describe the project and the information technology required.

This proposed project is to complete the items that were not finished in the FLST application during the last budget cycle (security, inspections, reporting, permit printing). These were not completed due to a low estimate and misunderstandings between IMS and this agency of the requirements for the application. As a result we ran out of money to complete the application as planned. Some minor modifications to a few existing components also need to be made during this phase. We cannot fully implement the application without these components, particularly security and reporting, being added to the application.

### Section III: Goals, Objectives, and Projected Outcomes (15 Points)

1. Describe the project, including:
   - Specific goals and objectives;
   - Expected beneficiaries of the project; and
   - Expected outcomes.

Specific goals and objectives for this project are:
> **Goal**: Improve workflow and efficiency of agency personnel.
> **Objectives**:
> - Review procedures and forms to improve work process, eliminate redundancy, and decrease costs.
> - Complete an application that will allow paperwork to be completed and transmitted to the Lincoln office and others, when possible, electronically in order to improve turnaround time.
> - Monitor emerging technologies to keep the agency and application up-to-date.

> **Goal**: Provide employees, other agencies and the general public better access to agency data.
> **Objectives**:
> - Allow electronic access to selected databases.
> - Ensure proper procedures are in place to secure data from unauthorized use.
> - Ensure application is accessible (meets special needs) to all users

Completion of this application will benefit staff, the general public, and other agencies. At this time since we do not have the security in place only three people have access to the data in the agency. Without implementing Guardian we cannot make the application available to our deputies in the field to aid them in doing their inspections; to the general public so they can look up tank location and other information which they commonly request from us; nor can we give other agencies, e.g., Department of Environmental Quality and our delegated authority cities access to the data so they can look up needed information on their own. Losing the previous application has impacted the Department of Environmental Quality's ability to access the data and increased work for us because we must now provide them with information they previously were able to retrieve on their own.

Our expected outcomes are to make the data more readily available to staff and others who need access to allow for a more timely turnaround in our workflow process. We also expect to collect better information about the storage tanks that will enable us to better meet federal reporting requirements than previously possible.

2.  Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.

We will know that our outcomes have been achieved by monitoring our daily workflow and contacts from the general public and other agencies to see if there is, in fact, a decrease in requests for information. We will also verify that our deputies and others are able to utilize the application to find the needed information on their own with minimal, if any, assistance from the support staff or IMS.

3.  Describe the project's relationship to your agency comprehensive information technology plan.

The completion of this project will meet several of the goals outlined in the IT plan, mainly providing employees, other agencies and the general public better access to the data and an increase in the workflow and efficiency of our employees.

## Section IV: Project Justification / Business Case (25 Points)

4.  Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

Most benefits of this project will be intangible. The biggest benefit of the application is providing accessibility to people outside the Lincoln office so they can do their own research. Our deputies will be able to complete required paperwork online eliminating the need to print off and mail in reports. Customers will be able to register facilities and tanks and submit changes to existing facilities and tanks online.

Some tangible benefits should be seen in decreased postage and supply costs (paper, printer cartridges, etc) as well as increased efficiency and turnaround time in information being processed. Staff should also be able to devote more time to other tasks since they will not have to spend time providing information to the general public or wait for someone else to enter the information into the computer before it is available through paper reports.

5.  Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.

We have discussed moving the application to an Access database and dumping the web-based application. This would decrease costs and give us the ability to query the database and generate reports that we are currently lacking. If we would move the data to Access it would be beneficial to add the staff in the Lincoln Office to PCLAN's server to ensure the data is regularly backed up and secure. This would add back some of the cost, although it would not be as expensive as completing the present application. However, this solution would defeat our goal of making the data accessible by staff outside the Lincoln Office as well as other agencies and the general public. Staff time and responsibilities would also increase, as they would be responsible for backing up the data and other functions, which has always been done by IMS since the databases have either been on the mainframe or one of IMS' servers.

Additional work was needed for the fee and invoicing structures to work correctly. This portion of the application is being moved to the NIS system. This does create additional work in having to keep facility and mailing addresses up to date in two different databases and adding new facilities to the NIS address book. Overall though, it was felt this additional work would be less time consuming than generating the invoices in the FLST application, and recording payments in both the FLST application and NIS.

If we do not complete the application, our deputies, the general public and other agencies will not be able to access the data. At this time we cannot run our own reports or queries. We must have IMS provide us

with the information we need which causes delays in getting needed information. Not having full security (Guardian) and reporting capabilities has had a great impact on the ability of the employees in this division to perform their duties in an efficient and timely manner.

6.  If the project is the result of a state or federal mandate, please specify the mandate being addressed.

One reason we chose to undertake this project is to meet the Governor's mandate for agencies to become more efficient and to participate in e-government. This system will also allow us to more easily meet new federal mandates since it will be maintained by IMS. With the previous system we had to initiate a contract with an outside contractor to make any necessary changes which always entailed training a new analyst on not only the application they wrote for us but also on the State's infrastructure.

## Section V: Technical Impact (20 Points)

7.  Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

The project was started because the previous application was running in Focus. The license for this software was not renewed so we needed to find an alternative method for maintaining our database. We chose this solution so the information would be more accessible to those who needed access. The application is hosted on an IMS server running Microsoft SQL Server. Internet access is required. The strength of this solution is the data is accessible to anyone with Internet capabilities. The weaknesses are the cost of running the application, which is increasing from $390 a month to $780 a month and the constraints of using dial-up Internet access (slowness, difficulty connecting, etc).

8.  Address the following issues with respect to the proposed technology:
    *   Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.
    *   Address conformity with applicable NITC technical standards and guidelines (available at http://www.nitc.state.ne.us/standards/) and generally accepted industry standards.
    *   Address the compatibility with existing institutional and/or statewide infrastructure.

The application will be hosted by IMS on one of their servers. This will provide a firewall and a secure physical location, daily backups, redundancy to the application in case of processor failure, UPS, data recovery and hardware/software upgrades every three years. Although the cost for this has increased, it is still cheaper than having our own server.

All applications built by IMS conform to the applicable standards and guidelines provided by NITC, W3C and IMS itself. The FLST application was developed using J2EE and the standard design and implementation practices provided by Sun were used and will be used in the future. Accessibility is also a key concern and the application was and will be developed according to 508 accessibility standards. Strong security passwords are created. Database design conforms to best practices in the industry. IMS also keeps in step with guidelines as they change.

The application can be deployed on every popular platform without any change in the code. This portability is handed to it by Java. The application takes advantage of the network infrastructure that exists throughout the state. Anyone with a browser and Internet connection can access the application. The data is in a standard RDBMS format and can be ported to any popular RDBMS system.

## Section VI: Preliminary Plan for Implementation (10 Points)

9.  Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

The Fuels Division-FLST section is the sponsor of the project and will review the application throughout the programming process and after completion to validate that everything is working properly and meets their needs. The project team will consist of IMS staff, LaVern Goens, Ameet Savant, and other programmers as necessary to complete the project. Clark Conklin and Lori Loyd will be involved from the State Fire Marshal's office.

10. List the major milestones and/or deliverables and provide a timeline for completing each.

Major milestones and their deliverables are:
- Security
    - Definition of roles and levels of access
    - Guardian incorporation and administration
    - Implementation of security throughout the system
- Revision of orders, investigations and inspections process
- Change of behavior in orders and investigations according to security roles
- Ability to print various permits and certificates
- Ability to generate new Facility Compliance Inspections
    - Construct interface for inspections
    - Database level changes for inspections
- Implement nQuire for reporting capabilities
    - Project analysis
    - Design and build
        - Create "x" views in SQL Enterprise Manager
        - Physical Layer
            - Import
            - Joins
            - Keys
        - Business Model Layer
            - Objects Sources
            - Sources
            - Columns
            - Logical Columns
            - Joins
        - Presentation Layer
            - Catalog
            - Tables
            - Columns
    - Testing
        - Test Repository
        - Write Reports
        - Adjust and test repository as necessary
    - Security
    - Training

No specific timeline has been set for these milestones/deliverables at this time. If funding is approved we anticipate beginning on this project in July/August 2003 and completing it by December 2003. IMS has estimated it will take approximately 500 hours to complete the remaining sections of the application.

11. Describe the training and staff development requirements.

Deputies and other agencies will be trained on how to use the application once security is implemented. Instructions will be provided for the general public informing them how to access and search for the needed information.

12. Describe the ongoing support requirements.

Ongoing maintenance to the application will be necessary as state and federal regulations change. This, as well as main support will be done by IMS. The agency IT person and the support staff who use the application on a daily basis will handle daily support.


**Section VII: Risk Assessment (10 Points)**

13. Describe possible barriers and risks related to the project and the relative importance of each.

The major barrier and risk related to this project are additional cost overruns and low estimates that were experienced in the first phase of implementing this application. Security, reporting and inspections are key elements that need to be completed so we can fully utilize the existing portions of the application. Without these elements in place, key staff and agencies are unable to access the data increasing the workload for the support staff. It is also necessary to have the IMS analyst run reports and/or do data dumps so we can work with our data and generate our own reports as well as provide information to contractors and others when requested.

We also face a risk of IMS increasing rates that would involve scaling back requirements in order to complete the application.

14. Identify strategies which have been developed to minimize risks.

During the completion of this application, we will closer monitor IMS' work, ensure there is a clear understanding between IMS and this agency of what is needed and what will be required to meet the needs and the cost involved, and we will limit the number of people involved from this agency to ensure the information is communicated clearly and correctly and to avoid previous communication problems experienced during Phase 1.

### Section VIII: Financial Analysis and Budget (20 Points)

15. Financial Information

Financial and budget information can be provided in either of the following ways:

(1) If the information is available in some other format, either cut and paste the information into this document or transmit the information with this form; or

(2) Provide the information by completing the spreadsheet provided below.

**Instructions**: Double click on the Microsoft Excel icon below. An imbedded Excel spreadsheet will be launched. Input the appropriate financial information. Close the spreadsheet. The information you entered will automatically be saved with this document. If you want to review or revise the financial information, repeat the process just described.

Excel Spreadsheet
(Double-click)

16. Provide a detailed description of the budget items listed above. Include:
- An itemized list of hardware and software.
- If new FTE positions are included in the request, please provide a breakdown by position, including separate totals for salary and fringe benefits.
- Provide any on-going operation and replacement costs not included above, including funding source if known.
- Provide a breakdown of all non-state funding sources and funds provided per source.

The requested funding outlined in the spreadsheet is to ensure the necessary funding is available to complete the application and to cover any additional modifications that may be necessary to the application due to changes in program requirements by the US Environmental Protection Agency and/or state regulations. Funding is also budgeted under Contractual Services for this project but is not new funding.

On-going operation costs are covered in the Data Processing line item of the budget for Program 227. An increase in this amount is being requested due to the increase in the hosting fees charged by IMS.

17. Please indicate where the funding requested for this project can be found in the agency budget request, including program numbers.

This project will be funded through cash funds that are found in Program 227. It may be possible to use some of the federal funds received for this division for this project. However, since the funds are designated for other purposes we would need to have permission from the involved federal authorities before we could divert some of the funds toward this project. This permission could be difficult to obtain.

(Revise dates as necessary for your request.)

| | Estimated Prior Expended | Request for FY2003-04 (Year 1) | Request for FY2004-05 (Year 2) | Request for FY2005-06 (Year 3) | Request for FY2006-07 (Year 4) | Future | Total |
|---|---|---|---|---|---|---|---|
| 1. Personnel Costs | | | | | | | $ - |
| 2. Contractual Services | | | | | | | |
| 2.1 Design | $ 15,500.00 | $ 5,600.00 | | | | | $ 21,100.00 |
| 2.2 Programming | $ 55,097.00 | $ 14,400.00 | | | | | $ 69,497.00 |
| 2.3 Project Management | | | | | | | $ - |
| 2.4 Other | | | | | | | $ - |
| 3. Supplies and Materials | | | | | | | $ - |
| 4. Telecommunications | | | | | | | $ - |
| 5. Training | | | | | | | $ - |
| 6. Travel | | | | | | | $ - |
| 7. Other Operating Costs | | | | | | | $ - |
| 8. Capital Expenditures | | | | | | | |
| 8.1 Hardware | | | | | | | $ - |
| 8.2 Software | | | | | | | $ - |
| 8.3 Network | | | | | | | $ - |
| 8.4 Other | | | | | | | $ - |
| **TOTAL COSTS** | $ 70,597.00 | $ 20,000.00 | $ - | $ - | $ - | $ - | $ 90,597.00 |
| General Funds | | | | | | | $ - |
| Cash Funds | $ 70,597.00 | $ 20,000.00 | | | | | $ 90,597.00 |
| Federal Funds | | | | | | | $ - |
| Revolving Funds | | | | | | | $ - |
| Other Funds | | | | | | | $ - |
| **TOTAL FUNDS** | $ 70,597.00 | $ 20,000.00 | $ - | $ - | $ - | $ - | $ 90,597.00 |